

## Solutions- Easy Test

Solutions for questions ۱ to ۴:

۱. (c) : In the two years, ۲۰۱۸ & ۲۰۱۹, the required percentage is more than ۲۵% but it happened in ۲۰۱۱ for the first time.
۲. (d) : The greatest decline happened for Course ۴ which is  $\frac{۱۸}{۱۸۰} \times ۱۰۰ = ۱۰\%$ .
۳. (c) : Percentage of Course ۱ candidates as a percentage of total:

Year	Percentage
۲۰۱۶	$\frac{۱۶۰}{۴۶۰} \times ۱۰۰ = ۳۴.۷۸\%$
۲۰۱۷	$\frac{۲۰۰}{۶۴۰} \times ۱۰۰ = ۳۱.۲۵\%$
۲۰۱۸	$\frac{۲۵۰}{۷۱۵} \times ۱۰۰ = ۳۴.۹۶\%$
۲۰۱۹	$\frac{۱۵۰}{۶۰۰} \times ۱۰۰ = ۲۵\%$
۲۰۲۱	$\frac{۱۴۰}{۷۲۰} \times ۱۰۰ = ۱۹.۴۴\%$
۲۰۲۲	$\frac{۱۶۰}{۸۱۰} \times ۱۰۰ = ۱۹.۷۵\%$

It is the highest for the year ۲۰۱۸.

۴. (d) : Total admission for each course:  
 Course ۲ =  $۴۰ + ۸۰ + ۹۵ + ۱۰۰ + ۱۱۰ + ۱۳۰ = ۵۵۵$ ;  
 Course ۵ =  $۱۰۰ + ۱۴۰ + ۱۸۰ + ۲۰۰ + ۲۵۰ + ۳۰۰ = ۱۱۷۰$ ;  
 Course ۴ =  $۱۴ + ۱۸ + ۱۰ + ۶ + ۱۲ + ۱۶ = ۷۶$ ;  
 Course ۳ =  $۸۰ + ۱۲۰ + ۱۲۰ + ۱۱۰ + ۱۵۰ + ۱۳۰ = ۷۱۰$ .

Solutions for questions ۵ to ۸:

۵. (d) : No details about Party ۳ is given.
۶. (b) : Difference from previous year is ۵% as is obvious from the given bar chart.
۷. (a) : Total votes in ۲۰۰۹ =  $(۲.۲۴ / ۴۴.۸) \times ۱۰۰ = ۵$  crore

Total Votes in 1999 =  $(1.228/30.7) \times 100 = 3.99$  crore  
 3 cr. is 20% less than 5 cr.

8. (b) : As data for other parties is not known

Solutions for questions 9 to 12:

9. (c) : Percentage change in R<sub>r</sub> Sales

$$= \frac{10200 - 12200}{12200} \times 100 = \frac{-2000}{12200} \times 100 = -16.39\%$$

10. (a) : R<sub>r</sub>

$$= \frac{26}{100} \times 10200 = 2652 \text{ ton}$$

$$R_z = \frac{20}{100} \times 10200 = 2040 \text{ ton}$$

$$R_o = \frac{24}{100} \times 10200 = 2448 \text{ ton}$$

11. (d) :

$$\text{Ratio} = \frac{2.1}{1.7} = 1.235$$

12. (c) : Required Ratio

$$= \frac{\text{Increase in } R_z}{\text{Increase in } R_r}$$

$$= \frac{2.46}{2.28} = 1.079$$

Solutions for questions 13 to 16:

13. (a) : Month  $(C_r + C_z)$

January  $\frac{70}{100} \times 100 = 70\%$

February  $\frac{70}{100} \times 100 = 70\%$

March  $\frac{100}{120} \times 100 = 83.33\%$

April  $\frac{100}{150} \times 100 = 66.67\%$

May  $\frac{50}{70} \times 100 = 71.43\%$

$$\text{June} \quad \frac{70}{100} \times 100\% = 70\%$$

Hence, the required percentage was the most in the month of February.

14. (d) : Month

Month	Total Sales	Percentage
January	170	$\frac{170}{100} \times 100\% = 170\%$
February	100	$\frac{100}{100} \times 100\% = 100\%$
March	220	$\frac{220}{100} \times 100\% = 220\%$
April	180	$\frac{180}{100} \times 100\% = 180\%$
May	150	$\frac{150}{100} \times 100\% = 150\%$
June	200	$\frac{200}{100} \times 100\% = 200\%$

No month have sales more than 220. Hence option (d)

15. (b) : Month

Month	Total Sales	Percentage
January	70	$\frac{70}{100} \times 100\% = 70\%$
February	50	$\frac{50}{100} \times 100\% = 50\%$
March	70	$\frac{70}{100} \times 100\% = 70\%$
April	100	$\frac{100}{100} \times 100\% = 100\%$
May	50	$\frac{50}{100} \times 100\% = 50\%$
June	70	$\frac{70}{100} \times 100\% = 70\%$

In February and June.

16. (c) : Verify the choices one by one.

(a) The total sales of all the four companies was different in each month, hence (a) is false.

(b) For the given period:

$$\text{Total Sales of } C_1 = 170 + 100 + 220 + 180 + 150 + 200 = 1120$$

$$\text{Total Sales of } C_2 = 70 + 50 + 70 + 100 + 50 + 70 = 410$$

Hence, (b) is false.

$$\text{(c) Total Sales of } C_2 \text{ for the given period} = 410$$

Required percentage

$$= \frac{410}{1120} \times 100\% = 36.6\%$$

(d) The sales of  $C_2$  were less than the sales of  $C_1$  in each month. Hence, (d) is false

Solutions for questions 17 to 20:

17. (c) : Shown of Printing is 8% of the total cost. Here  $100\% = 360^\circ$ . So,  $8\% = 32.8^\circ$ .

So, central angle =  $8 \times 3.6 = 28.8^\circ$

18. (a) : Let the total cost of writing the book is  $x$ .

So, 12% of  $x = 18000$ , Cost of Others = 15% of Total cost = 15% of  $18000 = 27000$ .

19. (b) : Let the total cost is 100, then Publishing cost = 25% of 100 = 25 & Marketing Cost = 30% of 100 =

30. So, by the Publishing cost is 16.66% more than the Marketing cost.

20. (c) : Let the total cost is 100, then Marketing cost = 30, New Marketing cost after the increase of 20% =

$1.2(30) = 36$ , New Total cost = 106. So, the percentage shown of Marketing cost

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